STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 98-621

December 10, 1998

PUBLIC UTILITIES COMMISSION Customer Net Energy Billing (Chapter 313) ORDER ADOPTING RULE AND STATEMENT OF FACTUAL AND POLICY ANALYSIS

WELCH, Chairman; NUGENT, Commissioner

## I. INTRODUCTION

In this Order, we adopt rules that establish requirements and standards for customer net energy billing after the introduction of retail access.

During its 1997 session, the Legislature fundamentally altered the electric utility industry in Maine by deregulating electric generation services and allowing for retail competition to begin on March 1, 2000. In enacting this legislation, the Legislature recognized that the changes in the industry structure would necessarily impact the means by which the State has traditionally implemented its energy policy. For these reasons, the Legislature included provisions in the restructuring Act to ensure that its policies are continued after the start of retail access. Among such provisions is a section on renewable resources, 35-A M.R.S.A. § 3210, in which the Legislature states:

<sup>&</sup>lt;sup>1</sup>An Act to Restructure the State's Electric Industry (the Act), P.L. 1997, ch. 316 (codified as Chapter 32, Title 35-A M.R.S.A. §§ 3201-3217).

<sup>&</sup>lt;sup>2</sup>To implement this policy, the Legislature required the Commission to adopt rules to implement a 30% renewable resource portfolio requirement and a program for voluntary contributions to fund renewable resource research and development.

The Legislature also recognized that industry restructuring would create implications for existing contractual relationships between qualifying facilities (QFs)3 and utilities. P.L. 1997, ch. 316 §§ 5, 6, 7, 8, 9. As a result of various legislative directives in this area, the Commission opened a rulemaking to review its current regulations regarding QFs (Chapter 36). Among the then existing provisions of Chapter 36 was a requirement that OFs with a capacity of 100 kW or less have the option to buy and sell electricity to a utility on a net energy basis. In amending Chapter 364 to be consistent with the changes in industry structure, we modified the net energy billing provision to address issues relating to existing contracts that extend beyond March 1, 2000. See Order Adopting Amended Rule and Statement of Factual and Policy Basis, Docket No. 97-794 (March 10, 1998). However, in addressing new net energy billing arrangements entered after the beginning of retail access, we decided that such rules would be more appropriately placed outside the OF regulations.

In our Chapter 360 Order Adopting Amended Rule, we discussed in some detail the nature of the provisions that we would propose in a separate rulemaking:

# New Arrangements After Retail Access

The net energy billing provision was originally included in Chapter 36 as a means of reducing costs for very small QFs so their power could economically be sold to This was done by avoiding the utilities. costs of a second meter and, instead, using a single meter that registered power flows in both directions. The original rationale for net billing, however, is no longer applicable as we enter a restructured environment for several reasons. First, CMP has routinely installed a second meter for purposes of measuring usage for retail sales tax purposes so that the intended cost savings have not occurred. Second, and more importantly, the concept of QFs' generating power and selling it to utilities at their avoided cost is rendered obsolete by a restructuring of the industry that allows for retail competition and restricts utilities from engaging in the

<sup>&</sup>lt;sup>3</sup>QFs are generally renewable power producers under 80 megawatts or cogenerators that meet specified efficiency standards.

<sup>&</sup>lt;sup>4</sup>Chapter 36 is now Chapter 360.

generation and sale of electricity. We note that our changes to Chapter 36 are essentially to deal with the remnants of QF contracts and policies that extend beyond the initial date of retail access; when all existing QF contracts expire, there will no longer be any need for Chapter 36.

After considering the comments on this topic, we agree with Messrs. Talmage and Inoue and other commenters that net billing has become more than simply a way of reducing metering costs; rather, it has developed into a means of encouraging the use of small-scale renewable technologies designed primarily to serve the customer's own electricity needs. The promotion of such an outcome is consistent with legislative policies favoring renewable generation and energy efficiency. 35-A M.R.S.A. §§ 3210, 3211. As a result, our view is that a long-standing billing and metering practice that facilitates customers' abilities to meet their own loads through renewable resources is not a practice that should be eliminated solely as a result of industry restructuring. Instead, the practice should be modified so as to be workable in a restructuring [sic] environment.

For the reasons stated above, however, new net billing arrangements after the initiation of retail access should not be included in a rule governing QFs and their power sale relationships with utilities that will phase-out over time as existing contracts terminate. It is more appropriate that such a provision be included in a rule generally governing the promotion of renewable resources in a restructured industry. We therefore have not included in the amended Chapter 36 a provision for new net billing arrangements after the advent of retail access; we will instead include such a provision in our rule on renewable resources, that will be promulgated pursuant to 35-A M.R.S.A. § 3210. This provision will be designed to facilitate the use of small-scale renewable generation to serve customers' own needs.

The new net billing provision that we anticipate including in the renewable resource rule will be the annualized methodology, proposed by Messrs. Talmage and Inoue and supported by Mr. Lord and the Public Advocate, in which usage and generation are netted against one another on a rolling basis for a 12-month period. Under this approach, customers can store, or bank, their generation from month-to-month for one year. After the end of the year, neither the T&D utility nor any generation provider would be obligated to pay for any net generation from these customers. This approach has many advantages. For example, the annual netting will facilitate certain renewable technologies (such as small hydro and wind power) whose output varies greatly over the year. The absence of any power sales removes any incentive to size facilities to generate more power than necessary to serve the customer's own electricity requirements. also avoids the anomalous result of a T&D utility that is not in generation business actually paying a customer if excess power is generated. Finally, the approach will be relatively easy to administer and will avoid complexities involved in requiring the purchase of very small amounts of energy.

The specific aspects of the annualized net billing provisions that we intend to include in the renewable rule are discussed below. To qualify for net billing, a customer will have to employ one of the technologies or fuel types listed in section 3210 and have a maximum installed capacity of 100 kW or less. There is no need to reduce the capacity limit because the absence of the sale of power should ensure that facilities are installed to meet customer loads rather then for energy sales. Additionally, we would not restrict availability to residential customers; there is no reason to exclude small businesses that wish to generate their own electricity from taking advantage of net billing.

We will not limit net billing to the generation portion of the electricity bills, but will apply it to T&D charges only to the extent they are usage sensitive. This approach mirrors the results of a customer who invests in energy efficiency. Customers may use their own generation to offset the total price of electricity but must pay any fixed charges designed to cover the costs of T&D system to which the customer remains connected.

We will also include a provision similar to that for existing contracts that allow customers the option of voluntarily arranging for net billing from a competitive provider. If a net billing customer takes service from the standard offer, the provider(s) will be required to provide generation on a net basis.

Finally, we will maintain the current provisions that net billing customers will not be charged the costs of a second meter, if one is necessary, and that net billing service will be pursuant to a Commission-approved standard contract.

*Id.* at 23-25 (footnotes omitted). The provisions of the final rule we adopt in this Order are consistent with the discussion quoted above.

### II. RULEMAKING PROCESS

On August 25, 1998, we issued a Notice of Rulemaking and proposed rule on customer net energy billing. Consistent with rulemaking procedures, interested persons were provided an opportunity to submit written and oral comments. The following provided comments: the Public Advocate, Central Maine Power Company (CMP), Dirigo Electric Cooperative, Green Mountain Energy Resources (GMER), Pamela Prodan, Frederick Munster, Richard Avery, Chris Carrol, and Ed Holt and Associates.

# III. DISCUSSION OF FINAL RULE

<sup>&</sup>lt;sup>5</sup>The quoted language states that the net billing provisions would be included in a renewable resource rule, along with provisions governing the portfolio requirement. Because the portfolio requirement rules are major substantive, we have decided to place the net billing provisions in a separate rule.

### General Considerations Α.

The comments generally supported the net billing rule; only CMP opposed the continuation of net billing. 6 CMP expressed confusion as to why the Commission would adopt a rule that potentially allows net billing customers to benefit at the expense of other ratepayers.

As we have explained previously, net billing is a practice that has been in place for many years and provides a public benefit by promoting the development and use of small-scale renewable facilities. This public policy was reaffirmed by the Legislation as part of the restructuring Act, 35-A M.R.S.A. § 3210. Although net billing does have costs in terms of reduced utility revenue and the expenses related to additional equipment, these costs, to date, have been extremely small. The CMP, however, points out the possibility that the number of net billing customers may increase over time. For this reason, we have added a cap on net billing load to the final rule that will trigger a review of the benefits and costs of additional net billing (the structure of the cap is discussed below). The inclusion of this cap should address CMP's concerns regarding the costs of continuing net billing in a restructured electric industry.8

#### Individual Sections В.

## Section 1: Purpose

The final rule summarizes the purpose of the Chapter as implementing the State's policy to encourage generation from renewable resources through the adoption of requirements and standards for customer net billing. We received no comments on this section and it is unchanged from the proposed rule.

### 2. Section 2: Definitions

<sup>6</sup>Dirigo was silent on the general desirability of net billing.

<sup>7</sup>CMP currently has 31 net billing customers.

<sup>8</sup>CMP argued that section 9 of the unallocated language of the restructuring Act evinces a legislative intent to prohibit net billing. That section states that utilities are no longer required to purchase power from QFs. Nothing in this rule, however, requires utilities to purchase power from QFs or anyone else.

This section contains definitions of terms used throughout the proposed rule. The definitions are self-explanatory. We note that the definition of net energy specifies that the difference between kilowatt-hours consumed and kilowatt-hours generated is determined as if measured by a single meter capable of registering flow in two directions. This language is intended to clarify that utilities may use two meters but that, for billing purposes, the amounts charged or credited must be determined as if it used a single meter. We received no comments on this section and it remains unchanged from the proposed rule.

# 3. Section 3: Annualized Customer Net Billing

This section contains the substantive provisions for annualized net billing. Pamela Prodan expressed confusion as to whether it is the Commission's intent that annualized net billing would be customers only "net billing" option. Ms. Prodan argued that customers should have the option to choose net billing on a continuous basis (into perpetuity), because of the potential yearly variations of some types of renewable resources. Frederick Munster and the Public Advocate supported Ms. Prodan's proposal for a "continuous" option. The Public Advocate also suggested a variation that would cap the accumulation of unused kilowatt-hour credits.

The Commission's intent is that, after the advent of retail competition, annualized net billing would be the only form of net billing that utilities are required to offer to customers. We decline to require utilities to offer a "continuous" net billing option. As discussed above, we view net billing as a means to encourage the development and use of small-scale renewable facilities. In doing so, however, we must be mindful of the resulting costs to utilities and their ratepayers, and draw an appropriate balance. As mentioned, we proposed annualized net billing, in part, to recognize the cyclic nature of some renewable resources and continue to view this approach as presenting a reasonable balance between the benefits and costs of promoting small renewables.

Sections 3(A) and (B) specify that, after the beginning of retail access, a customer that uses a renewable resource with a capacity of 100~kW or less to serve its own needs has an option to be billed on a net energy basis. To be

<sup>&</sup>lt;sup>9</sup>Our view is that the language in the rule is not ambiguous on this point. The rule requires utilities to bill on an annualized net bill basis if a qualifying customer so chooses. Because no other Commission rule or order mandates utilities to offer other forms of net billing, they are not required to do so.

consistent with statutory policy, renewable facilities for this purpose include those listed in 35-A M.R.S.A. § 3210(2)(C). These provisions are unchanged from the proposed rule. Frederick Munster suggested that the 100 kW limit be eliminated or raised to encourage greater use of clean fuels. We decline to alter the State's long-standing 100 kW limit for net billing. The 100 kW limit is more than sufficient to satisfy the rule's purpose of encouraging the development and use of small renewables facilities for customers' own electricity needs. 10

Section 3(C) of the final rule states that the renewable facility must be located on or in the vicinity of the customer's premises and used to meet the customer's own load. This requirement is consistent with the goal of net billing to encourage the use of small renewable facilities to serve customers' own needs. The proposed rule specified that the facility must be located on the customer's premises. Mr. Avery and the Public Advocate commented that customers may need to site photovoltaic arrays or small wind turbines on adjacent or nearby property for their projects to be feasible. We agree that allowing some flexibility in this regard is consistent with the purposes of the Chapter, and we have modified the final rule accordingly.

Section 3(D) sets forth the requirement for utilities to bill on an annualized net energy basis if a qualifying customer chooses. The section implements the annualized approach by allowing customers to roll-over generation in excess of their needs (in the form of kilowatt-hour credits) to be applied against usage in following months. The provision further specifies that customers are billed only for usage that exceeds their own generation during the billing period plus any credits from prior billing periods. Customers may accumulate unused kilowatt-hour credits for a 12-month period; at the end of this period, any unused credits will no longer be available to offset usage, and no compensation will be paid for excess credits. Finally, the section specifies that the net billing offset applies only to kilowatt-hour charges and customers remain responsible for all other charges. The provision is unchanged from the proposed rule.

CMP noted that smaller customers will primarily be charged for transmission and distribution (T&D) service through kilowatt-hour charges and could, therefore, avoid paying a

 $<sup>^{10}\</sup>text{We}$  note that the 100 kW limit is significantly larger then most state net billing provisions and we are not aware of any state that has a net billing limit greater than 100 kW. Additionally, larger renewable facilities will be promoted through the State's renewable portfolio requirement. 35-A M.R.S.A. § 3210.

significant amount of the cost of using the T&D system. Pamela Prodan and Ed Holt expressed concern that utilities may place net billing customers in separate classes with more fixed charges, or otherwise act to discriminate against net billing customers as a means to frustrate the purposes of this Chapter.

We understand that to the extent a customer's own generation matches or exceeds its usage over a 12-month period, the customer would only pay minimum charges for the use of the T&D system. However, as recognized above, this represents a relatively small cost of a program that helps to implement the State's energy policy of promoting the development of renewable resources. Regarding classification of net billing customers, we expect that utilities will not act to circumvent the purposes of this Chapter through customer classification of by any other means.

Section 3(E) provides that net billing customers have the option of obtaining generation service from any competitive provider that is willing to serve them on a net billing basis. If the customer takes standard offer service, the standard offer provider is required to provide generation service on a net energy basis. We did not receive any comments on this section, and it remains unchanged from the proposed rule.

Section 3(F) states that a utility may install a second meter, but may not charge a net billing customer for the additional costs. This provision is unchanged from the proposed rule.

CMP stated that it is required to install a second meter for net billing purposes and that net billing customers should pay the costs of all additional equipment. CMP argued that net billing solely benefits net billing customers, and therefore other customers should not have to pay for any additional costs. Mr. Munster opposes a requirement that net billing customers pay the cost of a second meter. Our rationale for not eliminating the historic practice of net billing as a result of industry restructuring is explained above. Traditionally, net billing customers have not paid the costs of a second meter, and we see no reason to alter that practice now.

<sup>11</sup>CMP questioned our analogy DSM in the Notice of Rulemaking, stating that DSM eliminates kilowatt-hour usage, while net billing "reallocates" energy usage. We agree that our analogy is not perfect. However, in either case, customers avoid T&D costs built into kilowatt-hour charges while paying fixed costs.

 $<sup>^{12}\</sup>mathrm{To}$  remove any ambiguity, it is our intent that net billing customers remain in the class for which they would otherwise qualify.

Contrary to CMP's assertion that only net billing customers benefit from the program, the Legislature has determined that the public in general will benefit from the promotion of renewable resources. It is for this reason that it is appropriate for incremental costs to be included in generally applicable rates. 13

Section 3(G) requires utilities to develop a standard contract for net billing customers. The use of a standard contract should simplify the administration of net billing and make it easier for customers to participate. proposed rule required the contract to be filed with the Commission. The final rule does not contain this requirement. We expect utilities to act in good faith to develop a net billing standard contract. If a customer believes a utility is attempting to frustrate the purpose of this Chapter through onerous or unnecessarily complex contract terms, the customer may bring the matter to the Commission's attention.

Section 3(H) requires utilities to notify the Commission when net billing load reaches 0.5% of its total peak load. Upon notification, the Commission will review the merits of net billing to determine whether new net energy billing arrangements should be entered into on a forward-going basis.14 CMP supported such a cap. GMER stated that it does not share the concern over excess costs, but suggested that some type of cap should address such concerns. Mr. Munster opposed any cap, noting that there is a natural limit on wind systems in the As discussed above, we added this provision as a reasonable means to address the concern that the costs of the practice could become significant over time. GMER provided information that states they have adopted a variety of net billing caps. Our view is that a 0.5% cap provides for a reasonable level of net billing before a review is triggered.

#### Section 4: Waiver or Exemption 4.

This provision contains the Commission standard provision for granting a waiver of or exemption from of the provisions of the Chapter that are not inconsistent with its purposes or those of Title 35-A.

<sup>&</sup>lt;sup>13</sup>We do not dispute CMP's assertion that it is required to use two meters for tax purposes.

<sup>&</sup>lt;sup>14</sup>The Commission would not frustrate then existing net billing arrangements.

Accordingly, we

### ORDER

- That the attached Chapter 312, Customer Net Energy Billing is hereby adopted;
- The Administrative Director shall send copies of this Order and attached rule to:
  - All electric utilities in the State; a)
- All persons who have filed with the Commission within the past year a written request for Notice of Rulemaking;
- All persons on the Commission's list of persons who wish to receive notice of all electric restructuring proceedings;
- All persons on the service list or who filed comments in the Inquiry, Public Utilities Commission, Inquiry into a Renewable Resource Portfolio Requirement, Docket No. 97-584;
- All persons on the service list or who filed comments in the Inquiry, Public Utilities Commission, Inquiry into an Inquiry into Effects of Restructuring on Contracts between Qualifying Facilities and Electric Utilities, Docket No. 97-497;
- All persons who filed comments in Docket No. f) 98-621;
- The Secretary of State for publication in q) accordance with 5 M.R.S.A. § 8053(5); and
- The Executive director of the Legislative Council, State House Station 115, Augusta, Maine 04333 (20 copies).

Dated at Augusta, Maine this 10th day of December, 1998.

BY ORDER OF THE COMMISSION

Dennis L. Keschl

Administrative Director

COMMISSIONERS VOTING FOR: Welch

Diamond

COMMISSIONER ABSENT: Nugent